MORTGAGE MARKET TRENDS

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MORTGAGE PORTFOLIO PERFORMANCE:

STRUCTURAL CHANGES AND

ONE-TIME SHOCKS

Research & Analysis
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INTRODUCTION

The composition and performance of mortgage portfolios are constantly in flux. The costs of funding mortgages change, the rates charged on mortgages change; sometimes they change together, sometimes not. Home prices rise and fall. Local employment picks up or drops off. Adjustable-rate mortgages are popular, then fixed-rate become so. Government-backed mortgage programs grow and shrink with changes in underwriting standards and terms. One-time events, such as hurricanes or earthquakes, can destroy billions of dollars of collateral in seconds, creating losses for both borrowers and lenders.

In this issue we examine a variety of current trends and their impact on the composition and performance of mortgage portfolios. Among them are the effects of the current lower and flatter yield curve, refinancing activity, growth in government-backed lending, and home price appreciation, especially on the east and west coasts. In addition, we look at the effects on mortgage portfolio performance of two destructive one-time events. Specifically, we look at how the Northridge earthquake in California and Hurricane Andrew in Florida affected home mortgage payment delinquencies and defaults in those areas. These two events can provide some insight about the relative risk geographically concentrated natural disasters pose to mortgage lenders.

CURRENT MORTGAGE MARKET CONDITIONS

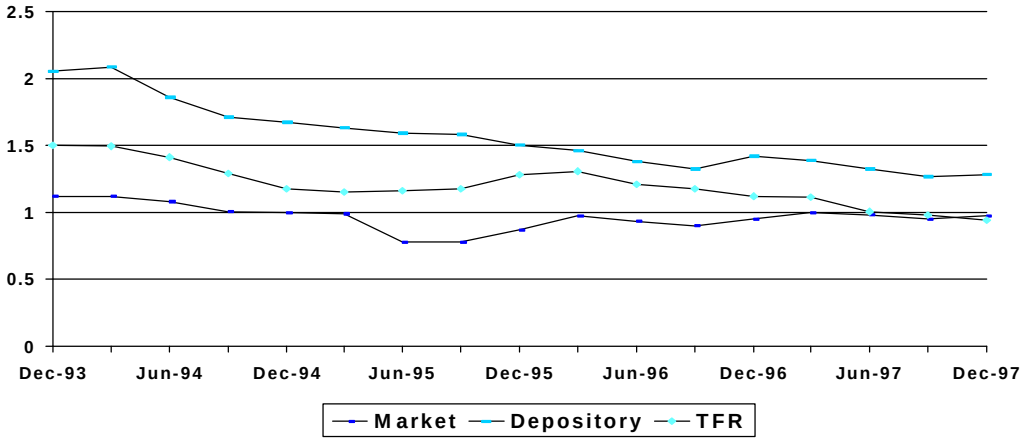
National Delinquency Rates Remain Constant

Figure 1 plots the percentage of seriously delinquent (90 days past-due or in foreclosure) residential mortgages, using both the MIC and Thrift Financial Report (TFR) data. Since the first issue of the *Mortgage Market Trends*, we have divided the MIC data into two categories: the market, which includes all MIC participants, and a subgroup, the depository institutions, which includes only the FDIC-insured MIC participants (a mix of both S&Ls and commercial banks). As the trend lines in Figure 1 show, the national delinquency rate during 1997 was virtually constant. Both the MIC depository and OTS-regulated (TFR) thrift delinquency rates improved during 1997.

Figure 1 also shows that depositories, as a group, have had higher delinquency rates than the national average for the entire period. The gap between the depository and the market delinquency rates has diminished substantially since 1993. The thrift industry, in particular, has improved its performance so much over the last few quarters that its delinquency rate is now slightly below the MIC

national rate (which is dominated by the GSEs' portfolio of conforming mortgages).

Figure 1: Percentage of Seriously Delinquent Mortgages



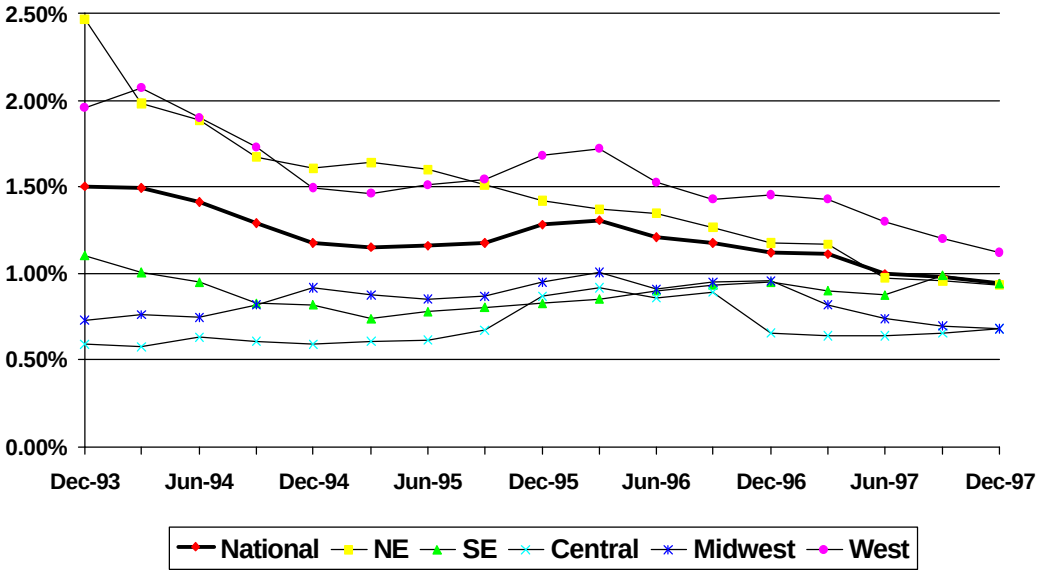
Source: MIC and TFR. *MIC* contains the combined data of the depository and non-depository participants in MIC's Loan Performance System. *Depositories* comprise both bank and thrift MIC participants. The thrift MIC participants are very large institutions located primarily on the East and West coasts. *TFR* represents all OTS-regulated institutions except one that specializes in defaulted mortgages. Because of their size and location, the performance of MIC thrift participants differs significantly from the average OTS-regulated thrift.

The rate of seriously delinquent mortgages for OTS-regulated thrifts, as shown by the TFR data in Figure 1, has declined by 33 percent over the last four years. Figure 2 shows the regional detail behind the improvement of the overall thrift delinquency rate. As can be seen, the decline in the average delinquency rate is due entirely to the improvement on the two coasts -- the Northeast and West regions.

The California housing markets have a disproportionate effect on the thrift industry totals, given the concentration of thrift mortgages in California. The recent improvement in real estate conditions in the west coast housing markets – reflected directly in house price changes -- accounts for much of the decline in delinquency rates. According to the Office of Housing Enterprise Oversight (OFHEO) House Price Index, home prices appreciated 5.6 percent in 1997 in California, reversing a five-year trend of falling or flat home prices.

Of the ten geographical divisions tracked by OFHEO, the Pacific area had the greatest home price appreciation (+5.7 percent) in 1997. New England placed third with 5.2 percent. (See the data appendix for home price appreciation conditions for all the states.) Improving real estate markets on the two coasts have materially affected the average delinquency rate for thrifts, and are likely to continue doing so in the near future.

Figure 2: OTS Regional Delinquency Rates

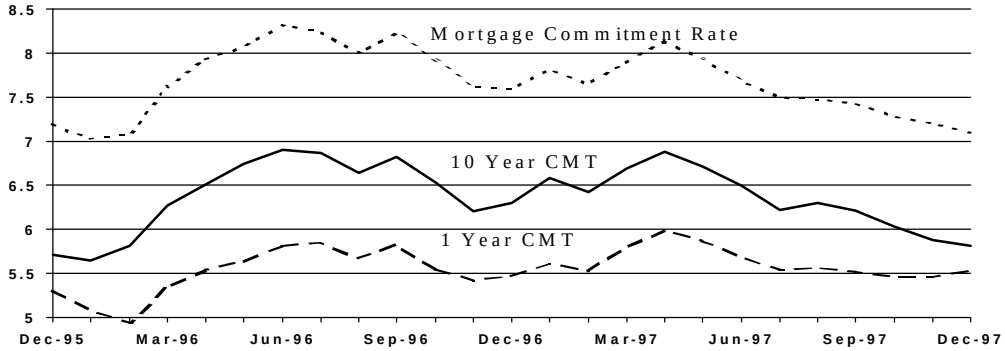


Falling Long-term Interest Rates, Constant Short-term Interest Rates

During 1997, mortgage-related interest rates rose early in the year, peaked in April, and then began to decline. Figure 3 shows two mortgage-related interest indices and the Freddie Mac commitment rate for thirty-year fixed-rate mortgages, as reported by the Federal Reserve Board of Governors. The one-year constant maturity Treasury (one-year CMT) index, which is representative of the various indices used to set one-year adjustable mortgages, began 1997 at about 5.5% and ended the year at almost the same level. In fact, this index has changed little since July. On the other hand, the ten-year constant maturity Treasury (ten-year CMT) index has declined steadily since April, and ended the year at 5.7%, a level it had not reached since January of 1996. The index has dropped by more than a hundred basis points since April. The ten-year CMT index tracks the commitment rate for thirty-year fixed rate mortgages well.

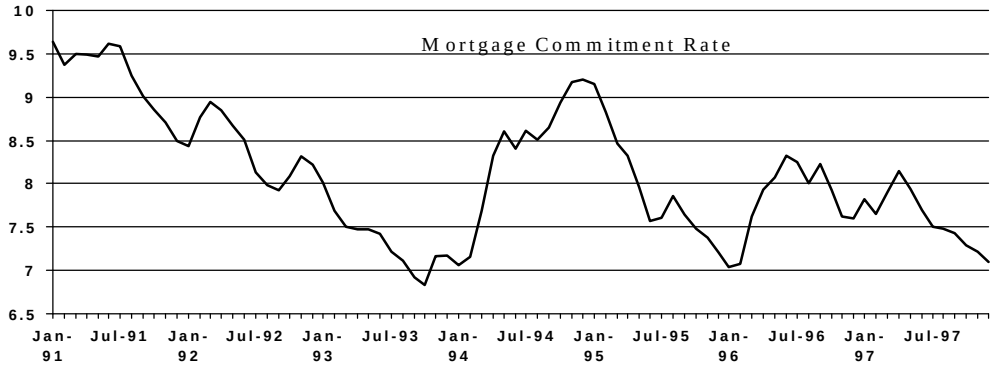
This absolute and relative (to the one-year CMT) decline in the ten-year rate has had two effects. First, the decline in the long rate makes a fixed-rate mortgage now relatively more attractive than an adjustable rate mortgage. This should lead to a higher percentage of fixed-rate mortgages among new originations. Second, the lower rate on new fixed-rate mortgages should lead to a higher level of refinancings, as borrowers either replace older, higher fixed-rate mortgages with new lower fixed-rate mortgages or replace adjustable-rate mortgages with fixed-rate ones.

Figure 3: Mortgage Related Interest Rate Indices



The amount of refinancing is determined by the current and recent past levels of longer-term interest rates and the rate of decline. A longer view of the commitment rate on fixed-rate mortgages puts the current levels of mortgage interest rates into this perspective. Figure 4 shows the thirty-year fixed-rate mortgage commitment rate since 1991.

Figure 4: Mortgage Commitment Rate (FHLMC)



Because of transaction costs, mortgage rates historically needed to move one or two percentage points below a mortgage's current rate to make refinancing worthwhile. But competition and new products have lowered this threshold. While the current rates are lower than they have been in the recent past, they have not fallen as quickly or to the level they reached during the height of the refinancing boom in 1993. Almost a quarter of the mortgage loans now held, according to the MIC data, were originated in 1993, when mortgage rates were as low as or lower than they are now. Thus, a smaller refinancing surge is likely now if mortgage rates do not go much lower. We examine the likely effect of refinancings on portfolio lenders in more detail below.

Market Share Data

Table 1 reports data on mortgage loan originations from HUD's *Survey of Mortgage Lending Activity (SMLA)*. The second quarter data are the most recent available. In the second quarter of 1997, the thrift industry's (Savings Banks and Savings

Table 1: Mortgage Market Shares

($ in millions)

Year	CB	Share	SB	Share	S&L	Share	MC	Share	Total
1996 Q1	$43166	22.2%	$6766	3.5%	$28394	14.6%	$114557	59.0%	$194196
Q2	45927	22.0%	9120	4.4%	35064	16.8%	117583	56.2%	209140
Q3	42327	22.2%	9979	5.2%	30362	15.9%	106637	55.9%	190722
Q4	47128	24.6%	8036	4.2%	27895	14.6%	106962	55.9%	191271
1997 Q1	48116	28.0%	5651	3.3%	25015	14.6%	91819	53.5%	171787
Q2	53070	27.0%	6286	3.2%	34410	17.5%	101830	51.7%	196910

Source: *Survey of Mortgage Lending Activity*, HUD

CB, Commercial Banks; SB, Savings Banks; S&L, OTS thrifts; MC, Mortgage Companies

Associations) market share of single-family residential mortgages rose to 20.7% from 18.8% at year-end 1996. Savings banks' market share stayed constant during the first two quarters of this year, but the Savings & Loans gained market share during the second quarter, rising to 17.5%, its highest level since 1993. Commercial banks also enjoyed a substantial increase in market share, rising to 27% in June 1997 from 24.6% at year-end 1996. The market share for mortgage banks fell to 51.7% from 55.9% at year end 1996. As a result, FDIC-insured portfolio lenders (banks and thrifts) have 47.7% of the mortgage origination market, their highest market share in some time.

Current Mortgage Rates and Terms

While the *SMLA* shows market share, it does not show the types of mortgages being originated. The Federal Housing Finance Board conducts its *Mortgage Interest Rate Survey* (*MIRS*) monthly among mortgage lenders on the interest rates and terms of their recently closed mortgages. Table 2 reports the survey results for the months ending each quarter over the last eighteen months for conventional (non-government-backed) mortgages.

Table 2 shows that, for all three lender groups, mortgage effective interest rates (which include the amortization of initial fees and charges over a ten-year period) have declined sharply since the end of June 1997. For S&Ls, the current average is 7.05%, for commercial banks, 7.46%, and for mortgage companies, 7.51%. The average effective interest rate was substantially lower for S&Ls than that for the commercial banks and mortgage companies in every month surveyed.

Table 2: Mortgage Rates and Terms

(In percent)

	Effective Rate	Percent of Loans by LTV Class				% Arms
		< 70%	70-80	80-90	> 90%	
S&Ls						
Sep-96	7.43	23	42	18	18	59
Dec-96	7.16	21	46	16	17	52
Mar-97	7.34	21	47	16	16	46
Jun-97	7.33	22	45	16	17	56
Sep-97	7.12	21	49	15	15	53
Dec-97	7.05	25	48	13	14	45
Commercial Banks						
Sep-96	7.84	25	42	12	21	44
Dec-96	7.65	22	28	20	30	32
Mar-97	7.77	20	39	19	22	31
Jun-97	7.86	21	38	18	22	21
Sep-97	7.59	22	37	17	24	16
Dec-97	7.46	18	32	16	35	9
Mortgage Companies						
Sep-96	8.15	20	34	19	27	19
Dec-96	7.76	21	36	16	27	15
Mar-97	7.92	19	34	17	30	14
Jun-97	8.03	18	36	17	28	16
Sep-97	7.77	19	36	18	27	13
Dec-97	7.51	19	36	17	27	8

Source: Mortgage Interest Rate Survey, Federal Housing Finance Board

The data in Table 2 suggest two reasons for the lower effective interest rate on mortgages originated by S&Ls – adjustable-rate mortgages (ARMs) and loan-to-value (LTV) ratios. S&Ls have traditionally originated a higher proportion of ARMs than either commercial banks or mortgage banks, and this pattern prevailed over the last year and a half. The differences are especially striking for the December 1997 data. While 45% of the S&Ls' originations were adjustable rate, only 9% of the commercial banks' and 8% of the mortgage companies' were adjustable rate. ARMs typically carry a lower contract interest rate than fixed-rate mortgages, and thus a higher percentage of ARM originations by S&Ls would result in a lower average effective interest rate for S&Ls.

The distribution of originations by loan-to-value ratios can also create differences in the effective interest rates between S&Ls and commercial banks and mortgage companies. Over the last year and a half, S&Ls have continued to originate a much smaller percentage of their loans in the highest LTV category (greater than 90% LTV ratio) than the two others. In December 1997, the percentage of high LTV-ratio mortgage originations was only 14% for S&Ls versus 35% for commercial banks, and 27% for mortgage companies. Higher LTV-ratio loans are riskier and should carry a higher rate and/or more fees and charges than lower LTV-ratio loans. For S&Ls, 73% of the originations have LTVs of less than 80%. The corresponding percentage for commercial banks is 50% and 55% for mortgage banking companies.

These two factors, the percentage of ARMs and the LTV-ratio distribution, likely affect not only the effective interest rates but also the longer-term delinquency performance of the mortgage portfolios held by S&Ls and commercial banks.

Effects of Refinancing

As Figure 3 showed, the difference between the one-year and the ten-year constant maturity Treasury interest rates narrowed considerably during 1997. In addition, long term mortgage commitment rates during the third quarter of 1997 approached the low levels reached in 1993 at the peak of the previous refinancing boom. Unexpectedly high levels of prepayments lowers the value of servicing rights and portfolio holdings, as either mortgages are lost to other lenders or are replaced with ones with lower contract rates.

With the current flat yield curve and relatively low long term rates, some homeowners are converting their adjustable-rate mortgages to fixed-rate mortgages (FRM) to protect themselves against future rate increases. Another important adverse effect of this type of refinancing on thrifts is that it may raise the interest rate risk for the industry if thrifts' portfolios have fewer ARMs and more FRMs. At the end third quarter, ARMs represented 68.9 percent of the mortgage portfolios held by OTS thrifts, down slightly from the first quarter level of 69.2 percent. For more information on the interest rate risk of the thrift industry, see the *Quarterly Review of Interest Rate Risk* on the OTS web site, WWW.OTS.TREAS.GOV.

There is a positive side to all of this for thrifts. Holding all else constant, as the percentage of ARMs held in thrift mortgage portfolios falls, thrifts become less exposed to the credit risk associated with variable-rate mortgages in periods of rising interest rates (payment shock). A previous *Mortgage Market Trends*' analysis showed that mortgages refinanced in 1992 and 1993 have outperformed virtually any other mortgage cohorts. Whether the current refinancing cohort will perform similarly, though, remains to be seen.

Although the current refinancing activity should produce some short term gains for thrifts as unamortized points and fees are taken into income, the longer term effects are less certain. Any long term credit risk improvement may be offset by higher interest-rate risk from a refinancing-induced shift towards fixed-rate mortgages. As interest rates rise, the market value of the fixed-rate mortgages held by thrifts fall. This could diminish the equity value of a thrift unless it is hedged against the rise in rates.

FHA Developments

FHA mortgages continue to grow as a proportion of all mortgages held by depositories. At the end of 1997, FHA loans represented 11.8% of the total loans held by depositories. Four years earlier, FHA loans represented just 4.3% of their total.

The rapid growth in FHA loans originations, especially ARM originations, has been the result of several factors, including expanded outreach efforts, a reduction in the guarantee fee, rising loan limits, and changed underwriting standards. This growth has not been without its costs, however. Table 3 shows the cohort performance for conventional and government-backed mortgages after twenty-four months of seasoning. In other words, it shows how mortgages originated in one year were performing at the end of the next year. The increase in the ratio of the government-backed seriously delinquent rate to that of the conventional mortgages shows the deterioration in their relative performance over the last 5 years. As the table shows, the performance of government-backed mortgages has deteriorated so much that government-backed mortgages originated in 1996 were more than seven times as likely as conventional mortgages to become seriously delinquent. Five years ago, the ratio was less than three times (2.7X).

Table 3: Cohort Performance

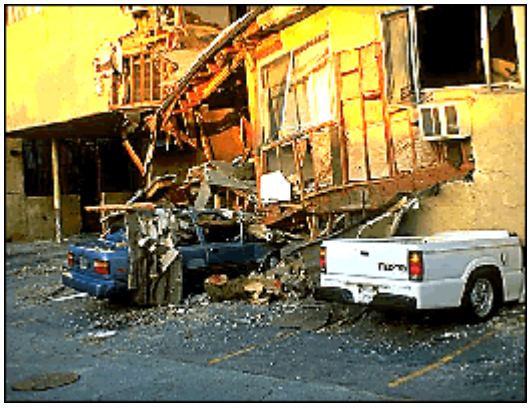
(Percent of Mortgages Seriously Delinquent)

	Origination Year				
	1992	1993	1994	1995	1996
Conventional	0.45	0.25	0.32	0.40	0.34
Gov't-Backed	1.22	1.11	1.98	2.44	2.52
Ratio	**2.7**	**4.4**	**6.2**	**6.1**	**7.4**

THE EFFECT OF NATURAL DISASTERS

In this section, we examine the effect that two natural disasters, Hurricane Andrew and the Northridge earthquake, had on home mortgage delinquency rates. Because natural disasters are geographically concentrated, they can pose a significant risk to lenders with a high proportion of assets in the affected areas. However, several factors may mitigate the losses to mortgage lenders in the event of natural disasters.

Northridge Damage (FEMA Picture)



Not all borrowers will default on their loans, even if they experience losses. Insurance may cover some or all of the home owner's losses. Single-family mortgages are also typically secured not only by the house but also by the land on

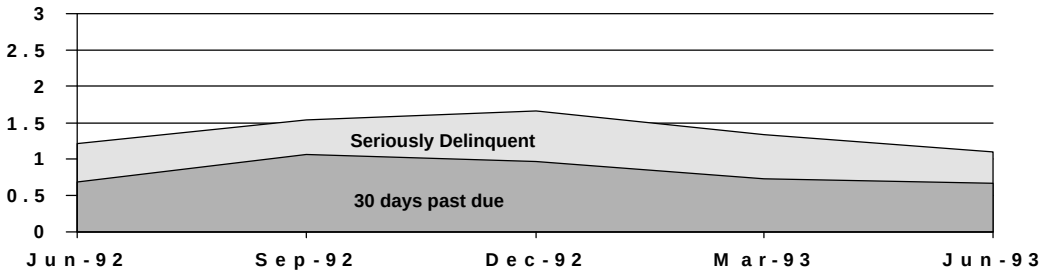
which the house sits. In the event of a default by the borrower, even if the house itself is destroyed, the land usually remains, providing some value to the lender.

Natural disasters also cause short-term disruptions that can interfere with timely mortgage payments. Lags in insurance payments, employment disruptions, and lost records can cause late or delayed payments. Whether or not a surge in missed mortgage payments presages a sharper than normal subsequent rise in defaults can be difficult to determine in the immediate aftermath of a natural disaster. The following analysis looks at the pattern of mortgages 30 days past due and those 90 days or more or in default (seriously delinquent) for two major disasters. The analysis examines the impact at the MSA level, since this is the most disaggregated level of data we have available.

On August 24, 1992, Hurricane Andrew hit southern Florida with winds recorded at 165 miles per hour. In its wake, it left 15 people dead, forced one million people to evacuate the area, and destroyed or damaged 126,000 homes and 9,000 mobile homes. Eleven thousand apartment units were destroyed and another 28,000 apartment units were damaged. The geographic region hit by Andrew was declared a national disaster area, with total losses estimated at over $30 billion. Insurance covered $15.5 billion of the losses, resulting in $14.5 billion in uninsured losses.

Figure 5 shows mortgage delinquency rates for the Miami MSA in the quarter prior to Hurricane Andrew and for the subsequent four quarters. The results show a one-time increase in mortgages 30 days past due in the first quarter immediately following the hurricane, with the delinquency rate falling back to pre-disaster levels rather quickly. The seriously delinquent rate peaked two quarters after the hurricane, and then returned to its pre-disaster level about a year later.

Figure 5: Hurricane Andrew on August 24, 1992



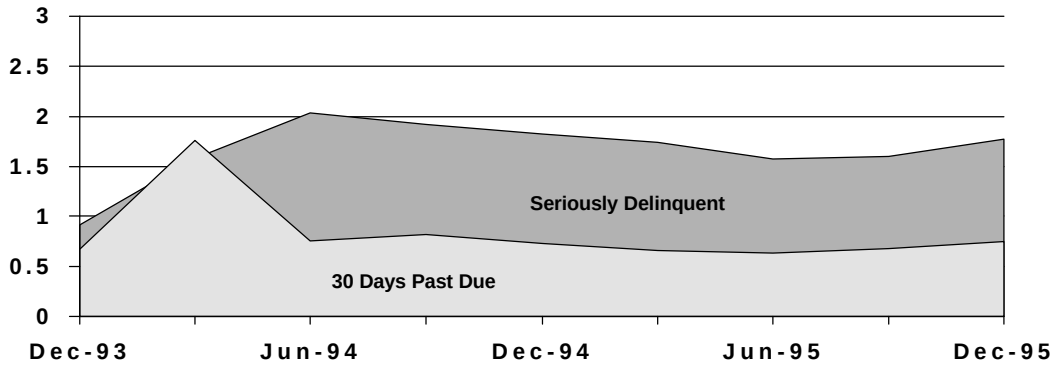
About a year and a half after Hurricane Andrew struck southern Florida, the Los Angeles area was rocked by the Northridge earthquake on January 17, 1994. The Northridge earthquake, one of the most costly natural disasters in the United States, measurably rearranged 2,192 square miles of metropolitan Los Angeles, resulting in some portions being two feet higher than before. Approximately 114,000 residential and commercial structures were damaged. Overall damages have been estimated at $25 billion. Only $4.5 billion of the losses were insured,

resulting in $21.5 billion in uninsured losses. Aftershocks from the 6.7 quake affected the area for three days after the initial severe shock, producing additional damage.

Figure 6 shows mortgage delinquency rates for the Los Angeles MSA in the quarter prior to the Northridge earthquake and for the subsequent eight quarters. Similar to Figure 5, the results show a sharp one-time increase in mortgages 30 days past due in the first quarter immediately following the earthquake and then reverting to its pre-disaster level rather quickly. Although the seriously delinquent rate peaked two quarters after the earthquake, it did not return to its pre-disaster level within a year, as was the case for Hurricane Andrew. The data indicate that the seriously delinquent rate for the Los Angeles MSA remained above the pre-disaster level for at least the following two years.

The magnitude of the uninsured losses from the Northridge disaster may have accounted for the persistently higher seriously delinquent rate. As previously noted, the Northridge earthquake is the most costly (net of insurance) natural disaster to have occurred in the United States. It caused massive structural damage to both residential and commercial properties, the extent of which was not known for months afterwards. As a result of these various factors, it is not surprising that seriously delinquent rates stayed at levels much higher than pre-disaster levels for an extended period of time.

Figure 6: Percentage of Mortgages Delinquent in the Los Angeles MSA around the Northridge Earthquake on Jan. 17, 1994



Property Types and Disaster Damage in LA

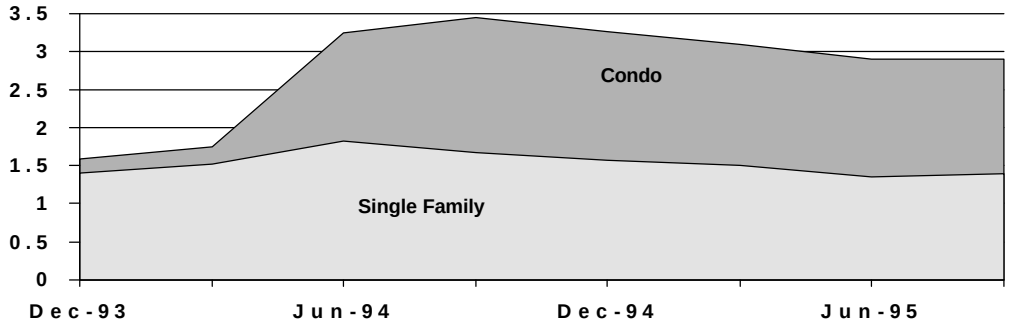
The types of properties securing the loans might also have affected the delinquency rates. At the end of 1993, 12.6 percent of the mortgages tracked by the MIC system in the LA MSA area were secured by condominiums. Single family mortgages made up 79 percent. The balance were co-op and 2-4 family mortgages.

As collateral, condominiums differ in important ways from single family homes. Condominiums, unlike single family homes, share in the common ownership of the land and amenities that comprise the condominium complex. Insurance cov-

erage and other disaster relief measures may vary between condominiums and common areas. Condominiums are often in multi-unit buildings. Because of the type of construction, condominiums may suffer more damage in an earthquake but less damage than single family homes in a hurricane.

Figure 7 shows the percentage of seriously delinquent mortgages for condominiums and single family homes in the LA MSA, for the quarter before and the three quarters following the earthquake. Single family mortgages showed only a slight increase in seriously delinquencies, and the rate quickly returned to its pre-earthquake level. Condominium mortgages behaved much differently. The rate of seriously delinquent condominium mortgages rose dramatically and remained substantially above its pre-earthquake level. The increase in condominium delinquencies accounted for virtually all of the increase in the overall delinquencies.

Figure 7: Decomposition of Seriously Delinquent Mortgages for Condominiums and Single Family Homes around the Northridge Earthquake



A further disaggregation by property type of the seriously delinquent mortgages into those past 90 days due and those in foreclosure underscores the differential impact of the Northridge earthquake on condominiums.

Figure 8: Decomposition of Condominium Mortgages Seriously Delinquent around the Northridge Earthquake

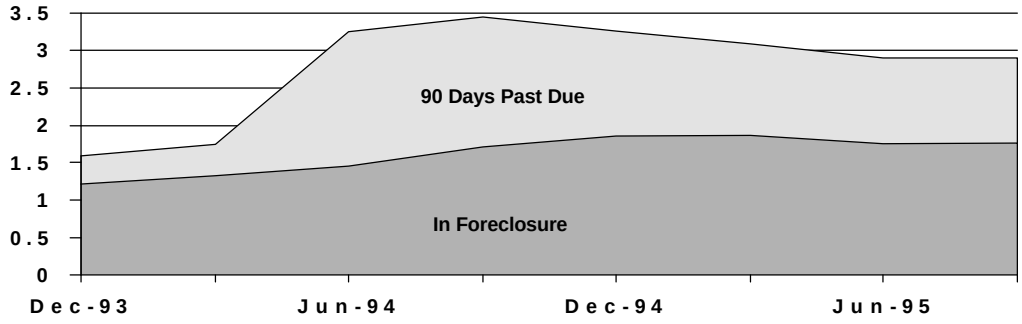


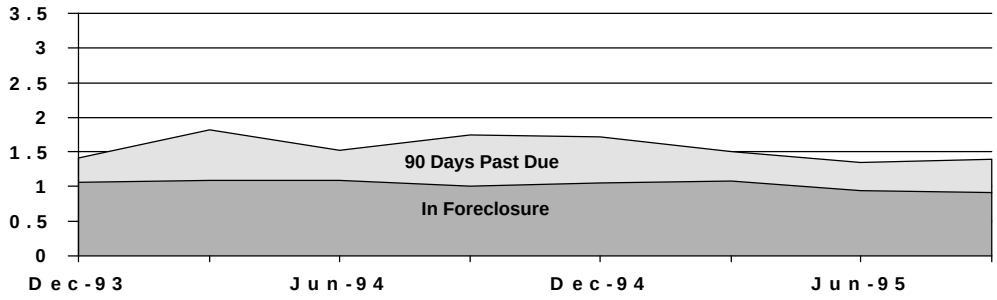
Figure 8 shows that in the quarter before the earthquake most (77%) of the seriously delinquent condominium mortgages were those in foreclosure. At the end of June 1994, about five months after the earthquake, the overall seriously delinquent rate had doubled for condominiums. Within the overall rate, the mortgages

90 days past due accounted for most of the increase. The percentage of condominium mortgages 90 days past due increased 383%, from 0.37% in December 1993 to 1.79% in June 1994. The percentage of condominium mortgages in foreclosure rose 46%, from 1.22% in December to 1.79% in June.

The decline in the ratio of in foreclosure to 90 days past due after the earthquake suggests that the mortgages that were 90 days past due were not rapidly passing into the foreclosure category. This may have occurred because of forebearance, delays in processing, or some combination of the two.

Figure 9 shows the relative performance for single family mortgages around the Northridge earthquake. While the rate for mortgages 90 days past due rose immediately after the earthquake, it dropped back in the following quarter. A year later, the rate reverted to its pre-earthquake level. Remarkably, the rate of single family mortgages in foreclosure varied little over the entire two-year span.

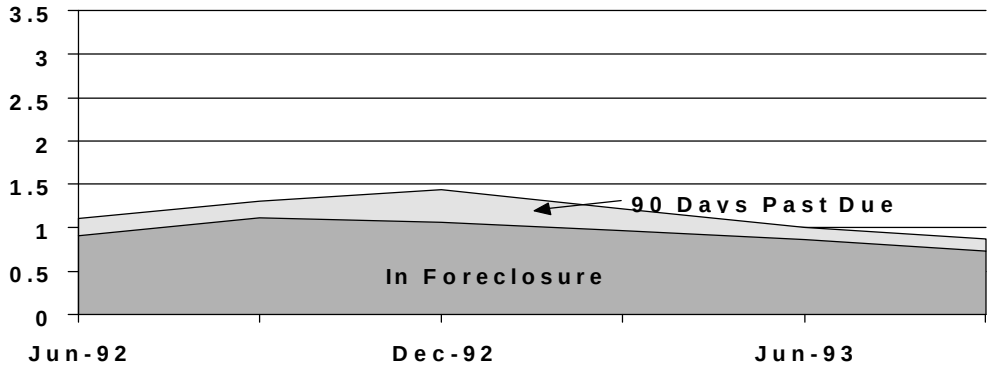
Figure 9: Decomposition of Single Family Mortgages Seriously Delinquent around the Northridge Earthquake



Condominium and Single Family Home Damage in Miami

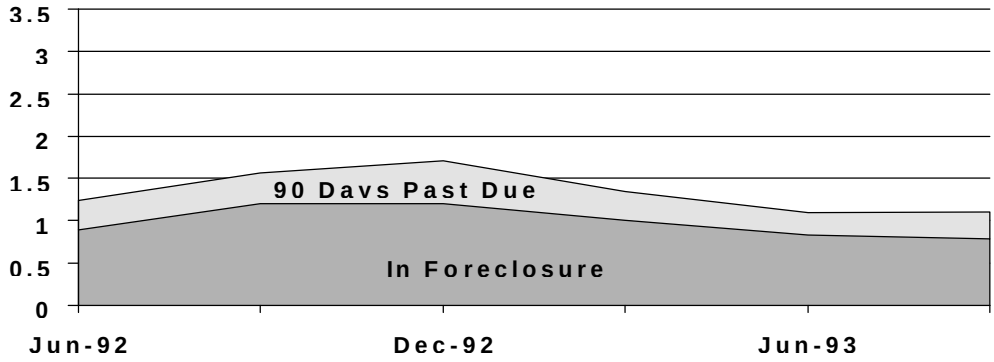
At the end of June 1992, the quarter preceding Hurricane Andrew, condominium mortgages represented 22.7 percent of the mortgages tracked by MIC in the Miami MSA, a presence almost twice that in Los Angles. After Hurricane Andrew, the seriously delinquent rate rose for both condominiums and single family mortgages, but less for condominiums than for single family mortgages. Figure 10 shows the performance of condominium mortgages, which perform like the single family mortgages in Los Angles.

Figure 10: Decomposition of Condominium Mortgages Seriously Delinquent around Hurricane Andrew



The performance of single-family mortgages is shown in Figure 11. They perform slightly worse than the condominium mortgages, but the difference not large.

Figure 11: Decomposition of Single Family Mortgages Seriously Delinquent around Hurricane Andrew



Local Market Conditions

The single most important determinant of default for a mortgage is its loan-to-value ratio. Local real estate market conditions affect the value of not only the house or condominium but also the land on which it sits. A major difference between Hurricane Andrew and the Northridge earthquake was the state of the local real estate markets. Real estate prices were rising strongly in Miami around the time of Hurricane Andrew and continued to do so. Real estate prices were falling in Los Angeles around the time of the Northridge earthquake and continued to do so.

Condominium prices are often more sensitive to changes in local real estate conditions. In a declining market, they can lose more value than single family structures because they are more of a commodity and can be more easily substituted

one for another. Much of the difference in performance between condominiums in Los Angeles and Miami after the disasters might be due more to market conditions than to the disaster itself.

CONCLUSION

The mortgage market, and mortgage delinquency rates in particular, remain vulnerable to external shocks, whether man-made or natural. The impact of a structural change or significant economic shock, however, may be more subtle and difficult to detect, and potentially much more dangerous, than that of a natural disaster. The financial fallout from natural disasters on thrifts and banks tends to be localized and minor compared to the broader effects of systemic structural changes. For example, the Northridge earthquake and Hurricane Andrew, while devastating, caused much less loss of capital to insured depositories than the inverted yield curve in the early nineteen eighties. While the structural changes in rates and composition we have observed here are clearly not of that magnitude, they nonetheless raise some credit and interest rate risk concerns that warrant continued attention.

Mortgage Market Trends

Volume 1 Issue 3

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Data Appendix

National and Regional Trends in Mortgage Delinquency Rates

as of December 31, 1997

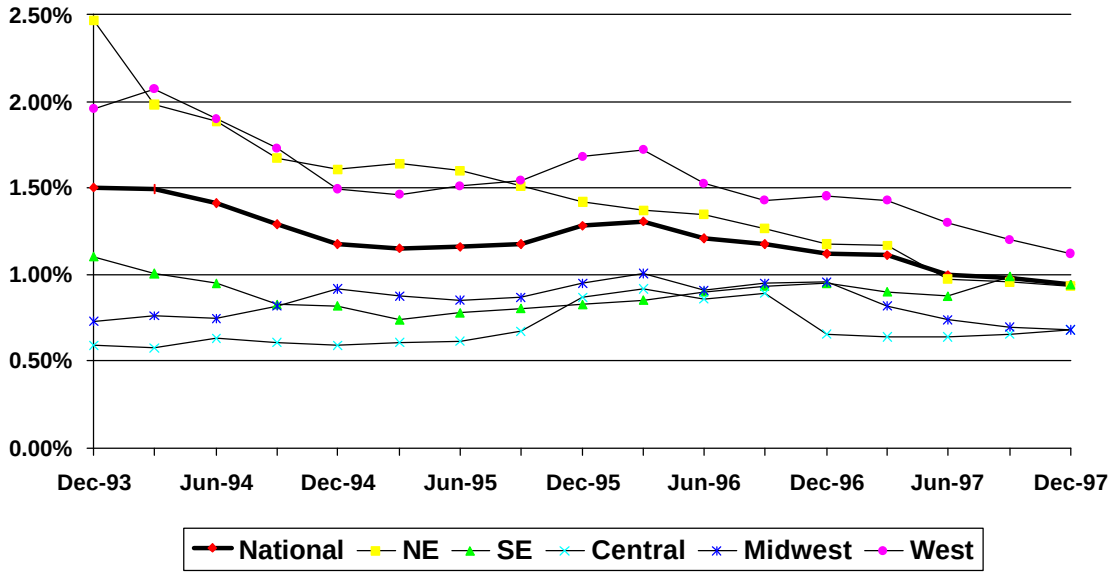
Regional and State Analysis

Seriously Delinquent & Home Price Appreciation Rates as of 12/31/97

(Based on $)

	MIC SD		TFR SD	Home Price Appreciation	
	Market	Depositories		1-Year	5-Year
National	**0.97**	**1.28**	**0.94**	**4.7**	**18.1**
Northeast	**1.24**	**1.64**	**0.93**		
Connecticut	1.23	1.46	0.80	**3.6**	**0.5**
Delaware	0.89	1.07	1.09	2.0	4.6
Maine	0.81	1.45	1.12	3.6	8.0
Massachusetts	0.69	0.88	0.48	6.0	15.7
New Hampshire	0.56	0.78	0.48	5.1	10.2
New Jersey	1.59	2.03	1.26	3.6	7.2
New York	1.54	1.82	0.93	3.2	4.2
Pennsylvania	1.08	1.56	0.82	2.4	8.3
Rhode Island	0.80	1.09	2.77	3.2	2.3
Vermont	0.57	0.99	2.12	3.2	5.4
West Virginia	0.36	0.88	0.93	8.3	28.3
Southeast	**1.10**	**1.47**	**0.94**		
Alabama	0.63	1.28	1.27	4.3	25.1
DC	1.59	1.68	1.90	2.6	2.3
Florida	1.28	1.65	0.68	4.5	16.2
Georgia	0.84	1.19	0.81	5.8	23.2
Maryland	1.65	2.14	1.97	2.4	6.5
North Carolina	0.69	0.99	0.56	6.3	27.9
Puerto Rico	0.99	2.76	7.36	*	*
South Carolina	0.75	1.03	0.43	6.6	24.0
Virginia	0.93	1.17	0.91	2.5	9.3
Central	**0.63**	**1.15**	**0.68**		
Illinois	0.88	1.30	0.78	3.1	21.3
Indiana	0.62	1.19	0.88	4.9	28.9
Kentucky	0.38	0.82	0.61	4.7	28.7
Michigan	0.25	0.52	0.81	7.2	38.3
Ohio	0.59	1.12	0.60	4.7	28.0
Tennessee	1.17	1.76	0.55	5.5	31.2
Wisconsin	0.29	0.65	0.31	4.4	34.8
Midwest	**0.64**	**0.88**	**0.68**		
Arkansas	1.10	1.91	0.68	4.5	26.7
Colorado	0.37	0.47	0.16	6.4	50.2
Iowa	0.26	0.42	0.77	4.0	30.3
Kansas	0.52	0.80	0.26	4.9	30.3
Louisiana	1.07	1.76	0.44	4.8	31.1
Minnesota	0.42	0.53	0.33	5.2	28.6
Mississippi	0.87	2.30	1.25	4.0	26.6
Missouri	0.49	0.71	0.41	4.2	24.0
Nebraska	0.25	0.38	0.75	3.9	33.4
New Mexico	0.64	0.81	0.89	3.5	34.5
North Dakota	0.41	0.48	0.36	1.9	27.0
Oklahoma	0.79	1.23	0.64	3.4	22.0
South Dakota	0.43	0.57	0.44	4.4	32.8
Texas	0.87	1.16	0.97	3.0	14.1
West	**1.03**	**1.20**	**1.12**		
Alaska	0.39	0.79	-	1.2	19.5
Arizona	0.63	0.80	0.17	4.8	29.5
California	1.19	1.34	1.16	5.6	-3.0
Hawaii	1.54	2.10	1.69	-5.1	-10.9
Idaho	0.64	0.81	0.09	5.6	36.6
Montana	0.60	0.81	0.23	4.4	44.0
Nevada	1.06	1.27	-	3.1	16.1
Oregon	0.32	0.38	0.75	6.3	53.2
Utah	0.53	0.80	0.81	6.1	71.6
Washington	0.59	0.69	0.29	5.8	23.7
Wyoming	0.42	0.64	0.50	3.6	37.9

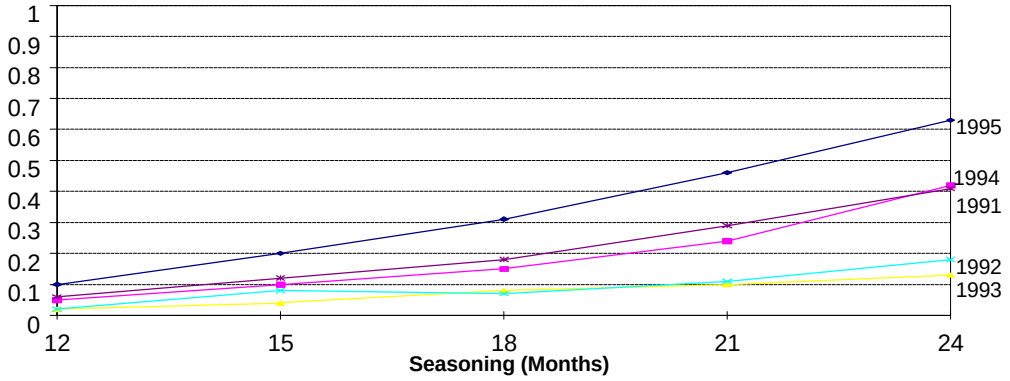
OTS Regions
Seriously Delinquent Mortgages (%)
Based on Thrift TFR Data by Location of Headquarters



Home Price Appreciation
1997 Annual Rate
(Source: OFHEO Resale Database)

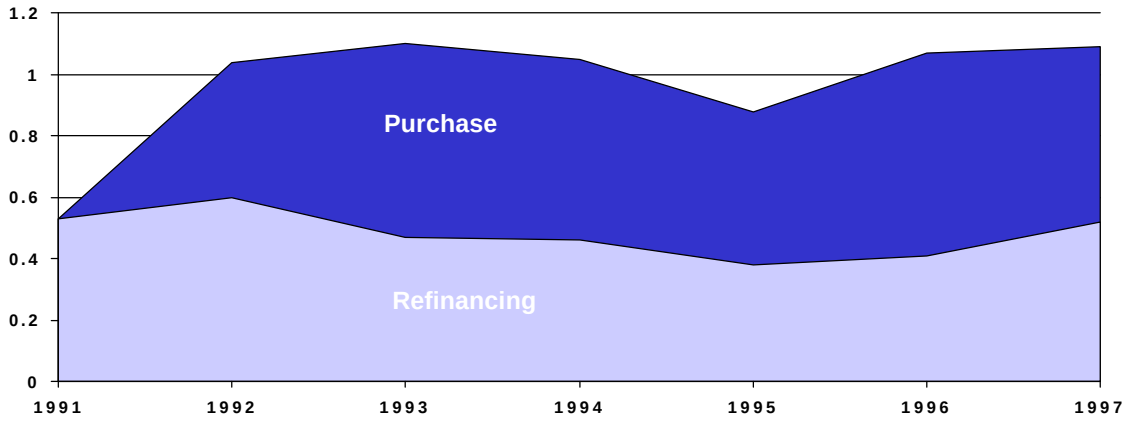
National Cohort Performance by Vintage

(Source: MIC)



Home Purchase Vs. Refinancing Mortgages

(Source: MIC, Percent Seriously Delinquent)



Fixed Vs. Variable Rate Mortgages

(Source: MIC, Percent Seriously Delinquent)